

NATURAL RESOURCES CONSERVATION SERVICE

BRUSH MANAGEMENT

(Acre)

Code 314

Supplement No. 4 – Suppression of Mesquite

GENERAL SPECIFICATION

This supplement provides guidance for suppression spraying of mesquite when the emergence of nearby susceptible crops or the Oklahoma Department of Agriculture's "Restricted Areas for the Application of Hormone Type Pesticides" precludes spraying prior to soil temperatures reaching 75 degrees at the 12-inch depth. The rates provided in Table 1 are for broadcast applications.

This guidance is derived from field observations and the Grazon P+D 2EE label, EPA Reg. No. 62719-182.

Table 1. Herbicide treatments for suppression of mesquite

Herbicide Mixture	Herbicide Rates / acre	Volume / Acre	Timing	Remarks
Grazon P+D (picloram - .54 lbs./gal, and 2, 4-D 2 lbs./gal)	1.5 - 3 pts. per acre	1 gal.	April - May	Apply when leaf fully expanded and the color has changed from a light green to a darker green and soil moisture and temperatures are favorable for plant growth. Use the highest rate in dense mesquite or when growth conditions are less than optimal. Use prior to emergence of susceptible crops.
2,4-D ester	1 lb.	1 gal.	April - May	Apply when leaf fully expanded but prior to emergence of susceptible crops.

The herbicides can be applied in two different patterns: full swath or wide swath. Full swathing is defined as the applicator flying 60-foot swath widths and covering the entire acreage to be treated. Wide swathing is defined as the applicator flying a 60 foot swath width, skipping a 60 foot width, then spraying the next 60 foot width, thereby spraying half the pasture in an alternating pattern.

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There are considerations for full swathing vs. wide swathing. With full swathing, there will be more coverage of chemical, and an anticipated higher suppression of mesquite and broadleaf plants. With wide swathing, there will be less chemical applied to the pasture therefore a lower suppression rate of mesquite and forbs depending upon drift to the skipped swath.

Note: If spraying is stopped, mesquite will resume pre-treatment levels as a multi-stem growth form within a couple of year. This treatment is not anticipated to have a high kill rate on mesquite.

This practice can be timed two ways:

1. Apply annually three times to gain initial suppress of mesquite. Thereafter, spray only once every 3 - 4 years to maintain approximately a 10% canopy.
2. Apply the treatment once every 2 - 4 years to maintain approximately a 10% canopy. This treatment will result in less reduction of broadleaf forbs that may be important to clients with stronger wildlife objectives.

_____/s/_____
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State Resource Conservationist

____4/14/03____
Date